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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,286	07/06/2006	Dieter Funk	021500-143	1547

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BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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SZEWCZYK, CYNTHIA

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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07/07/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,286	<b>Applicant(s)</b> FUNK ET AL.	
	<b>Examiner</b> CYNTHIA SZEWCZYK	<b>Art Unit</b> 1791	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 6, 2009 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 7, 13, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by WRIGHT (US 3,374,078).

WRIGHT teaches an apparatus for supporting and heating glass sheets on a gas bed. WRIGHT teaches the device comprises a chamber (28 in figure 2) connected to a source of compressed gas (46 in figure 2), wherein the chamber includes an upper wall (20 in figure 2) with dimensions to the outline of a glass sheet (see figure 1) having a plurality of apertures having an entry bore with progressively widening hole (34 in figure 3). Figure 2 shows that the holes (34) are in fluid communication with the source of gas

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(46). It is inherent that the central zone of the bed can be defined such that has a greater degree of perforation than in edge zones.

Regarding claim 2, WRIGHT does not specify a specific central zone, however a person of ordinary skill would be able to identify an area of the bed as the central zone such that the area is equal to that of the edges.

Regarding claim 7, figure 3 shows that the entry bore of the nozzle (34) widens abruptly in the direction of the flow of the gas.

Regarding claim 13, WRIGHT discloses that the chamber is made of ceramic material (col. 4, lines 10-12).

Regarding claim 14, figure 1 shows that the chamber (20) is designed as a one piece moulding.

Regarding claim 15, WRIGHT discloses that the chamber is provided with heating elements (25 in figures 1 and 2).

### ***Claim Rejections - 35 USC § 103***

4. Claims 3-6, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over WRIGHT (US 3,374,078).

WRIGHT teaches an apparatus for supporting and heating glass sheets on a gas bed. WRIGHT discloses an example wherein the diameters of the exhaust holes vary depending on the zone of the glass (col. 4, lines 62-73). It would have been obvious to one of ordinary skill in the art that the same variable diameter arrangement could be applied to the gas inlet holes to provide adequate and uniform gas support for the glass

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sheet (col. 4, lines 73-75). It would have been obvious to one of ordinary skill in the art that the air inlet holes could have been adjusted to achieve the ranges of instant claims 3-5, 16, and 17.

Regarding claim 6, it also would have been obvious to one of ordinary skill in the art that the holes could have been adjusted such that the degree of perforation decreased from the feed side of the glass to the other side. Therefore, the claimed invention would have been obvious.

5. Claims 8-10, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WRIGHT (US 3,374,078) in view of CARLOMAGNO et al. (US 5,336,288).

WRIGHT teaches an apparatus for supporting and heating glass sheets on a gas bed. WRIGHT is silent to the air nozzle containing three cylindrical components.

CARLOMAGNO et al. discloses an apparatus for the manufacture of glass sheets using a glass cushion. Figure 4 of CARLOMAGNO et al. discloses that the nozzle has several sections of different diameters. CARLOMAGNO discloses that the first cylindrical section (57) has a diameter of 2 to 8 mm (col. 5, lines 47-48) which incorporates the range of instant claim 8. It would have been obvious to one of ordinary skill in the art that the nozzle of CARLOMAGNO could have been used as the nozzle of WRIGHT because WRIGHT discloses that the nozzles need only be a chamfered or beveled shape (col. 4, lines 25-26), which the nozzle of CARLOMAGNO would provide.

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Regarding claim 8, WRIGHT discloses that the nozzle opens up to a diameter of 3/8 inch (col. 4, lines 28), or 9.525 mm, which would be considered the third section. It would have been obvious to one of ordinary skill in the art that the second section would have a diameter greater than this value, but less than the maximum value disclosed by CARLOMAGNO, which is 100 mm (col. 4, lines 49-50).

Regarding claim 9, see the discussion of claim 8.

Regarding claim 10, figure 4 of CARLOMAGNO also shows that the cylindrical sections contain a coinciding cylinder axis.

Regarding claim 18, WRIGHT discloses that the first section of the nozzle may be 1/8 inch diameter, or 3.175 mm.

Regarding claim 19, see the discussion of claim 10.

6. Claims 11, 12, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over WRIGHT (US 3,374,078) in view of SCHWARTZ et al. (US 2004/0226318 A1).

WRIGHT teaches an apparatus for supporting and heating glass sheets on a gas bed. WRIGHT is silent to placing a cloth on the upper wall. SCHWARTZ et al. discloses an apparatus and method for bending glass. SCHWARTZ et al. discloses that the mold can be covered in a heat resistant fabric in order to avoid marking the surface of the glass (para. 25, lines 1-3) and to protect the mold. SCHWARTZ et al. discloses that the fabric can be air permeable (para. 17, lines 20-24) and that a stainless steel can be used as a material for the cloth (claim 14). It would have been obvious to one of

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ordinary skill in the art to use the cloth of SCHWARTZ et al. on the bed of WRIGHT because it would still allow gas to flow through but would protect the glass from getting marked. Therefore, the claimed invention would have been obvious.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA SZEWCZYK whose telephone number is (571)270-5130. The examiner can normally be reached on Monday through Thursday 7:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CS

/ Carlos Lopez/

Primary Examiner, Art Unit 1791